FIG. 1

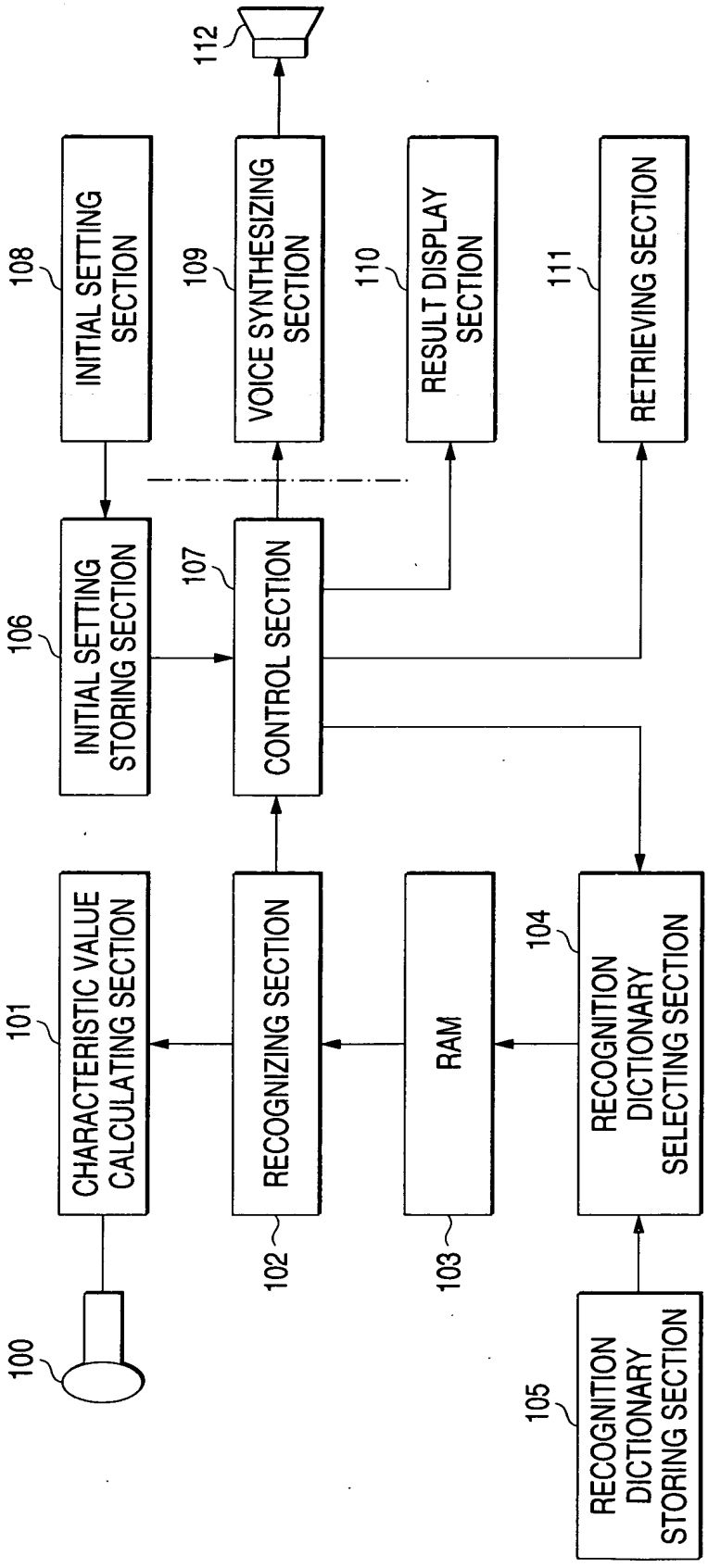

100
CHARACTERISTIC VALUE CALCULATING SECTION
101
RECOGNIZING SECTION
102
RAM
103
RECOGNITION DICTIONARY SELECTING SECTION
104
RECOGNITION DICTIONARY STORING SECTION
105
INITIAL SETTING STORING SECTION
106
CONTROL SECTION
107
INITIAL SETTING SECTION
108
VOICE SYNTHESIZING SECTION
109
RESULT DISPLAY SECTION
110
RETRIEVING SECTION
111
112

FIG. 2

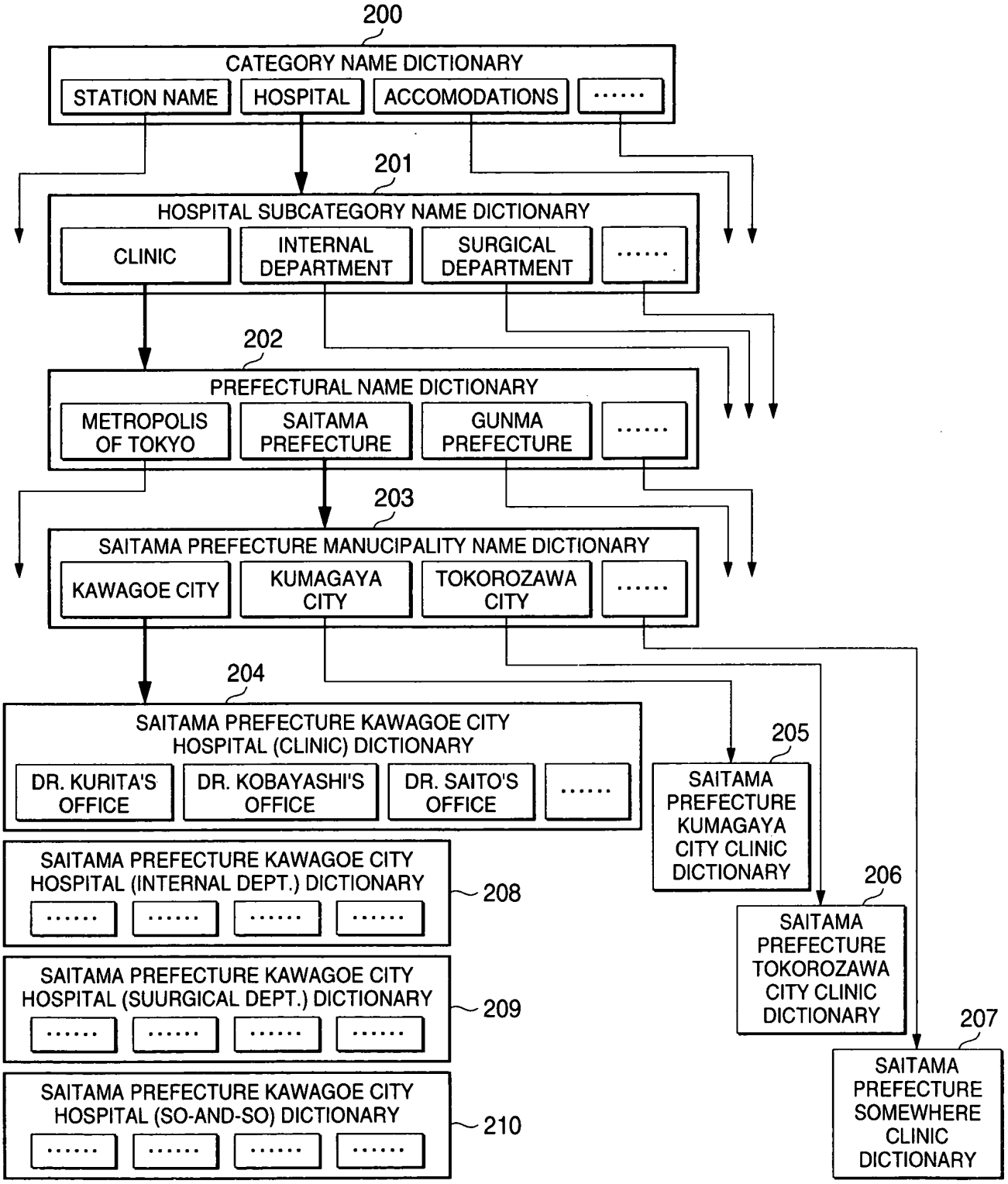

200
CATEGORY NAME DICTIONARY
STATION NAME
HOSPITAL
ACCOMODATIONS
.....
201
HOSPITAL SUBCATEGORY NAME DICTIONARY
CLINIC
INTERNAL DEPARTMENT
SURGICAL DEPARTMENT
.....
202
PREFECTURAL NAME DICTIONARY
METROPOLIS OF TOKYO
SAITAMA PREFECTURE
GUNMA PREFECTURE
.....
203
SAITAMA PREFECTURE MANUCIPALITY NAME DICTIONARY
KAWAGOE CITY
KUMAGAYA CITY
TOKOROZAWA CITY
.....
204
SAITAMA PREFECTURE KAWAGOE CITY HOSPITAL (CLINIC) DICTIONARY
DR. KURITA'S OFFICE
DR. KOBAYASHI'S OFFICE
DR. SAITO'S OFFICE
.....
205
SAITAMA PREFECTURE KUMAGAYA CITY CLINIC DICTIONARY
206
SAITAMA PREFECTURE TOKOROZAWA CITY CLINIC DICTIONARY
207
SAITAMA PREFECTURE SOMEWHERE CLINIC DICTIONARY
SAITAMA PREFECTURE KAWAGOE CITY HOSPITAL (INTERNAL DEPT.) DICTIONARY
208
SAITAMA PREFECTURE KAWAGOE CITY HOSPITAL (SUURGICAL DEPT.) DICTIONARY
209
SAITAMA PREFECTURE KAWAGOE CITY HOSPITAL (SO-AND-SO) DICTIONARY
210

FIG. 3

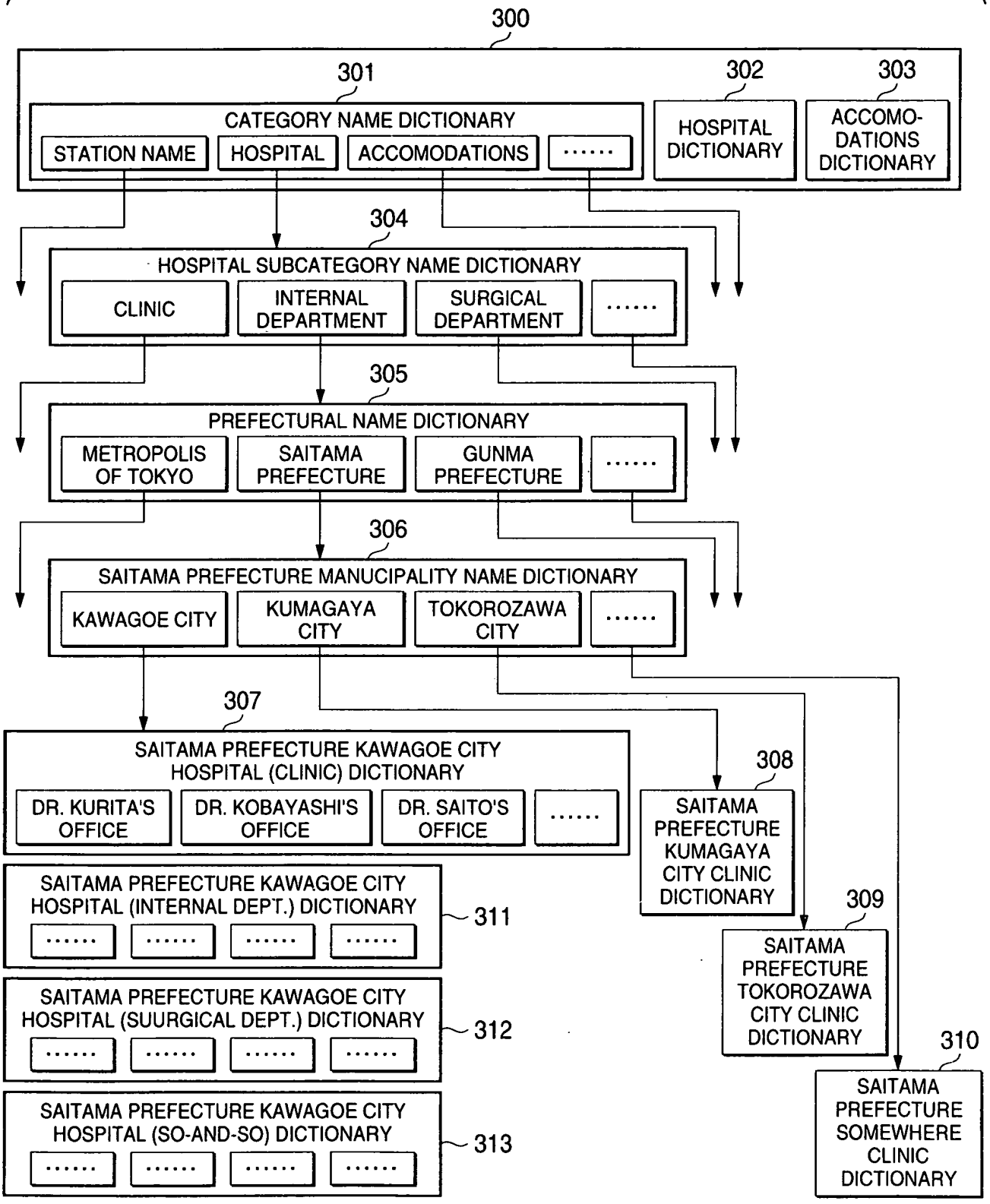

300
301
CATEGORY NAME DICTIONARY
STATION NAME
HOSPITAL
ACCOMODATIONS
.....
302
HOSPITAL DICTIONARY
303
ACCOMO-DATIONS DICTIONARY
304
HOSPITAL SUBCATEGORY NAME DICTIONARY
CLINIC
INTERNAL DEPARTMENT
SURGICAL DEPARTMENT
.....
305
PREFECTURAL NAME DICTIONARY
METROPOLIS OF TOKYO
SAITAMA PREFECTURE
GUNMA PREFECTURE
.....
306
SAITAMA PREFECTURE MANUCIPALITY NAME DICTIONARY
KAWAGOE CITY
KUMAGAYA CITY
TOKOROZAWA CITY
.....
307
SAITAMA PREFECTURE KAWAGOE CITY HOSPITAL (CLINIC) DICTIONARY
DR. KURITA'S OFFICE
DR. KOBAYASHI'S OFFICE
DR. SAITO'S OFFICE
.....
308
SAITAMA PREFECTURE KUMAGAYA CITY CLINIC DICTIONARY
309
SAITAMA PREFECTURE TOKOROZAWA CITY CLINIC DICTIONARY
310
SAITAMA PREFECTURE SOMEWHERE CLINIC DICTIONARY
SAITAMA PREFECTURE KAWAGOE CITY HOSPITAL (INTERNAL DEPT.) DICTIONARY
311
SAITAMA PREFECTURE KAWAGOE CITY HOSPITAL (SUURGICAL DEPT.) DICTIONARY
312
SAITAMA PREFECTURE KAWAGOE CITY HOSPITAL (SO-AND-SO) DICTIONARY
313

FIG. 4

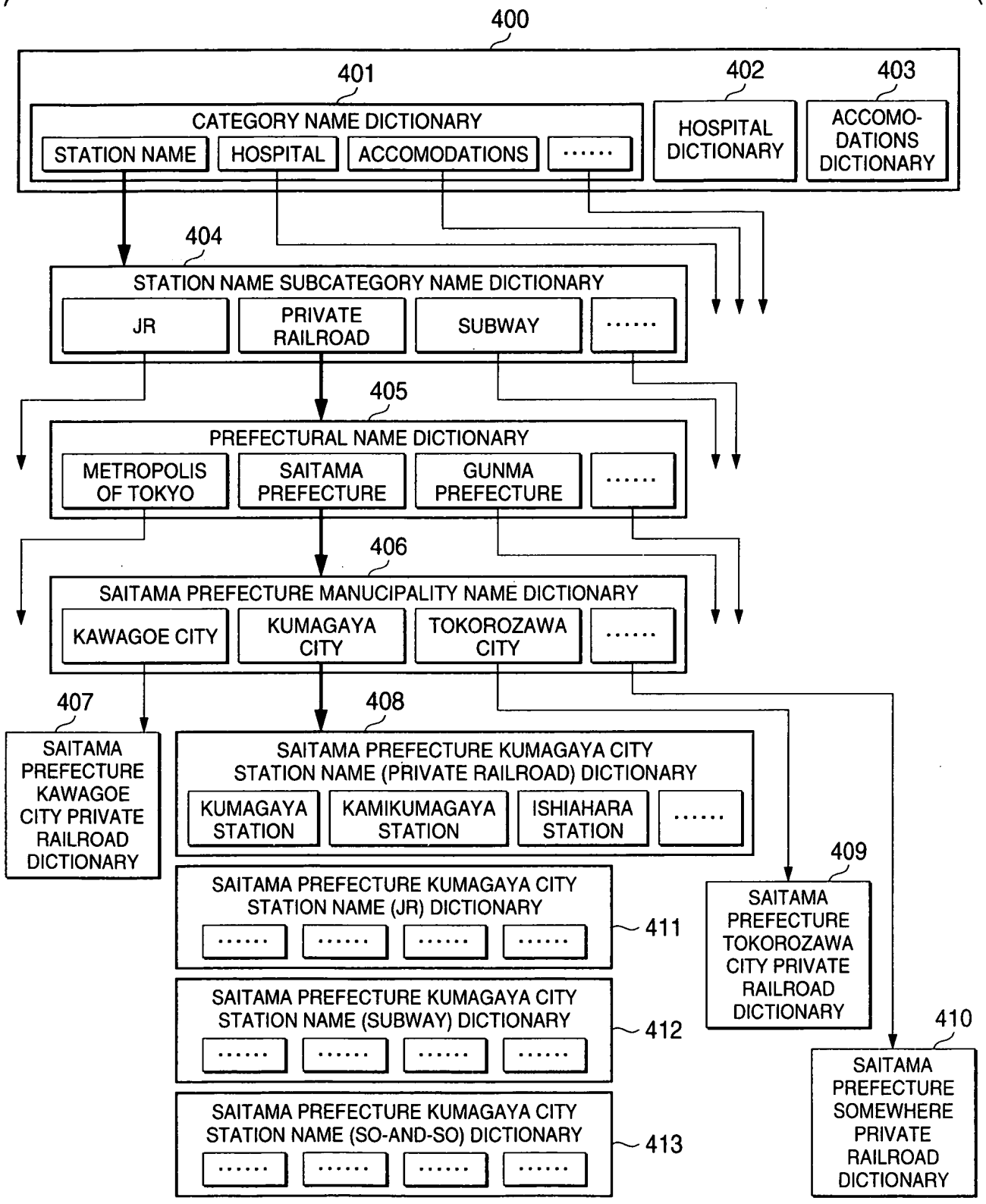

400
401
CATEGORY NAME DICTIONARY
STATION NAME
HOSPITAL
ACCOMODATIONS
.....
402
HOSPITAL DICTIONARY
403
ACCOMO-DATIONS DICTIONARY
404
STATION NAME SUBCATEGORY NAME DICTIONARY
JR
PRIVATE RAILROAD
SUBWAY
.....
405
PREFECTURAL NAME DICTIONARY
METROPOLIS OF TOKYO
SAITAMA PREFECTURE
GUNMA PREFECTURE
.....
406
SAITAMA PREFECTURE MANUCIPALITY NAME DICTIONARY
KAWAGOE CITY
KUMAGAYA CITY
TOKOROZAWA CITY
.....
407
SAITAMA PREFECTURE KAWAGOE CITY PRIVATE RAILROAD DICTIONARY
408
SAITAMA PREFECTURE KUMAGAYA CITY STATION NAME (PRIVATE RAILROAD) DICTIONARY
KUMAGAYA STATION
KAMIKUMAGAYA STATION
ISHIAHARA STATION
.....
409
SAITAMA PREFECTURE TOKOROZAWA CITY PRIVATE RAILROAD DICTIONARY
410
SAITAMA PREFECTURE SOMEWHERE PRIVATE RAILROAD DICTIONARY
SAITAMA PREFECTURE KUMAGAYA CITY STATION NAME (JR) DICTIONARY
411
SAITAMA PREFECTURE KUMAGAYA CITY STATION NAME (SUBWAY) DICTIONARY
412
SAITAMA PREFECTURE KUMAGAYA CITY STATION NAME (SO-AND-SO) DICTIONARY
413

FIG. 5

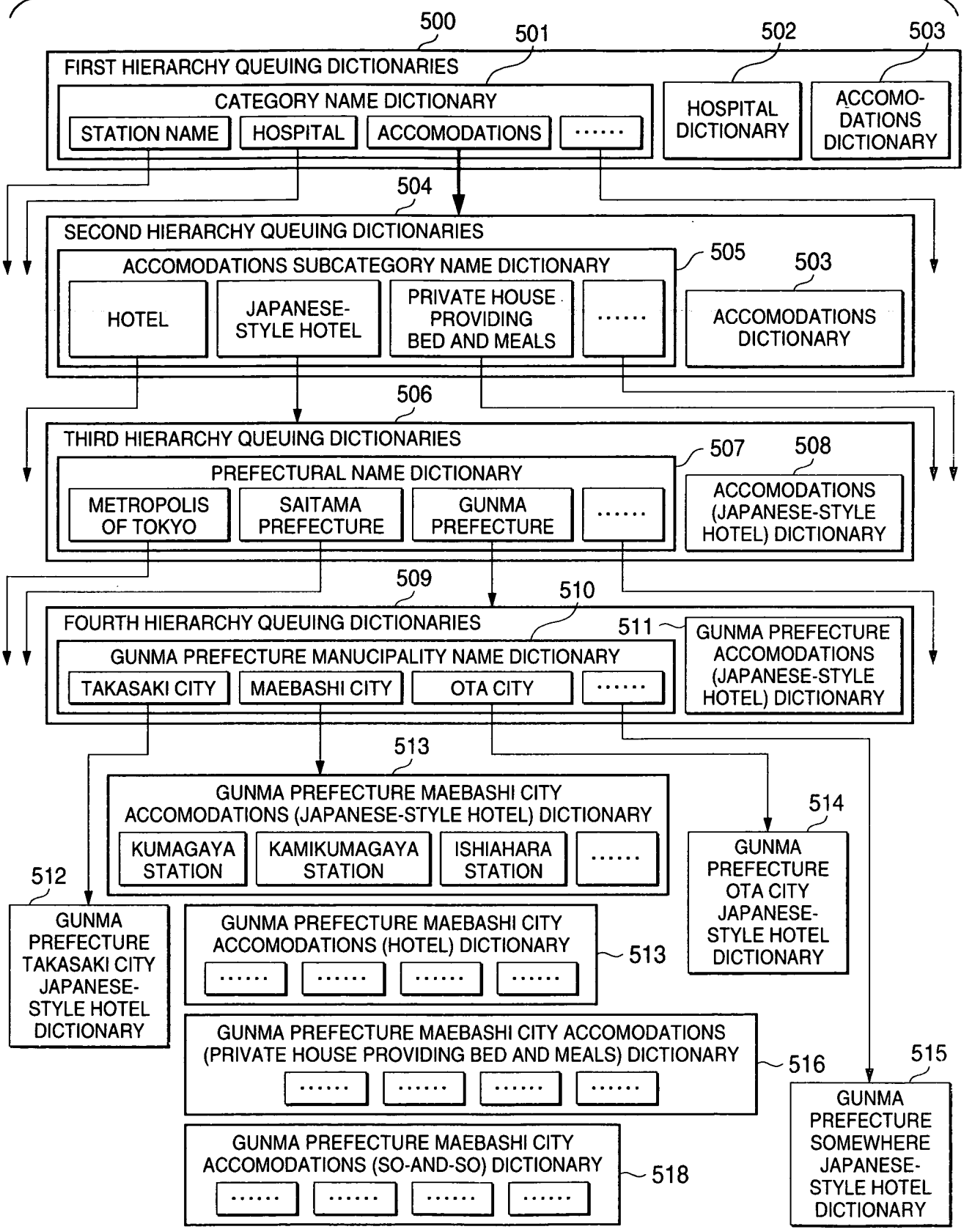

500
501
502
503
FIRST HIERARCHY QUEUING DICTIONARIES
CATEGORY NAME DICTIONARY
STATION NAME
HOSPITAL
ACCOMODATIONS
.....
HOSPITAL DICTIONARY
ACCOMO-DATIONS DICTIONARY
504
SECOND HIERARCHY QUEUING DICTIONARIES
ACCOMODATIONS SUBCATEGORY NAME DICTIONARY
505
503
HOTEL
JAPANESE-STYLE HOTEL
PRIVATE HOUSE PROVIDING BED AND MEALS
.....
ACCOMODATIONS DICTIONARY
506
THIRD HIERARCHY QUEUING DICTIONARIES
PREFECTURAL NAME DICTIONARY
507
508
METROPOLIS OF TOKYO
SAITAMA PREFECTURE
GUNMA PREFECTURE
.....
ACCOMODATIONS (JAPANESE-STYLE HOTEL) DICTIONARY
509
510
FOURTH HIERARCHY QUEUING DICTIONARIES
511
GUNMA PREFECTURE ACCOMODATIONS (JAPANESE-STYLE HOTEL) DICTIONARY
GUNMA PREFECTURE MANUCIPALITY NAME DICTIONARY
TAKASAKI CITY
MAEBASHI CITY
OTA CITY
.....
513
GUNMA PREFECTURE MAEBASHI CITY ACCOMODATIONS (JAPANESE-STYLE HOTEL) DICTIONARY
KUMAGAYA STATION
KAMIKUMAGAYA STATION
ISHIAHARA STATION
.....
514
GUNMA PREFECTURE OTA CITY JAPANESE-STYLE HOTEL DICTIONARY
512
GUNMA PREFECTURE TAKASAKI CITY JAPANESE-STYLE HOTEL DICTIONARY
GUNMA PREFECTURE MAEBASHI CITY ACCOMODATIONS (HOTEL) DICTIONARY
513
.....
.....
.....
.....
GUNMA PREFECTURE MAEBASHI CITY ACCOMODATIONS (PRIVATE HOUSE PROVIDING BED AND MEALS) DICTIONARY
516
515
.....
.....
.....
.....
GUNMA PREFECTURE SOMEWHERE JAPANESE-STYLE HOTEL DICTIONARY
GUNMA PREFECTURE MAEBASHI CITY ACCOMODATIONS (SO-AND-SO) DICTIONARY
518
.....
.....
.....
.....

FIG. 6

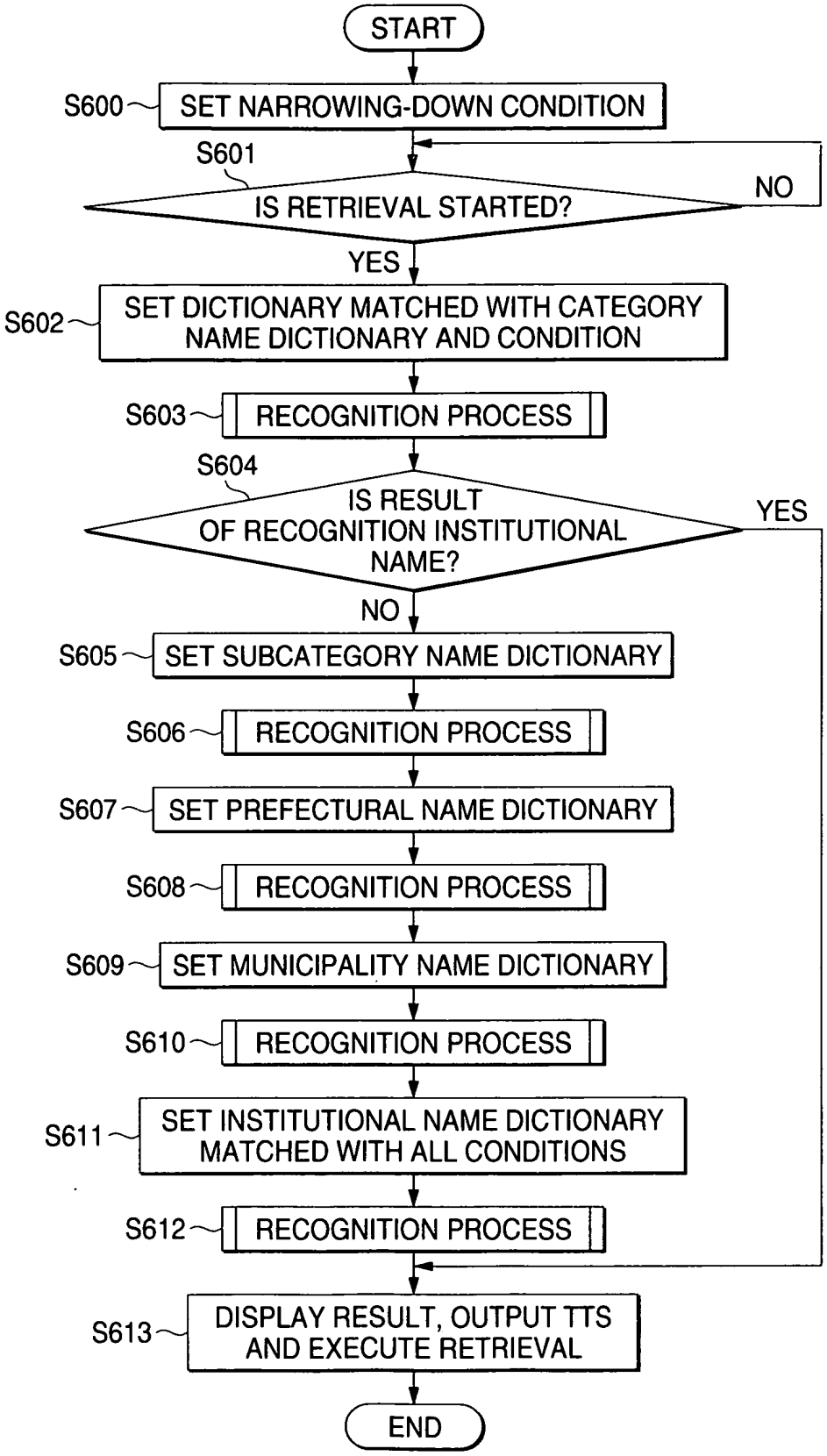

START
S600
SET NARROWING-DOWN CONDITION
S601
IS RETRIEVAL STARTED?
NO
YES
S602
SET DICTIONARY MATCHED WITH CATEGORY NAME DICTIONARY AND CONDITION
S603
RECOGNITION PROCESS
S604
IS RESULT OF RECOGNITION INSTITUTIONAL NAME?
YES
NO
S605
SET SUBCATEGORY NAME DICTIONARY
S606
RECOGNITION PROCESS
S607
SET PREFECTURAL NAME DICTIONARY
S608
RECOGNITION PROCESS
S609
SET MUNICIPALITY NAME DICTIONARY
S610
RECOGNITION PROCESS
S611
SET INSTITUTIONAL NAME DICTIONARY MATCHED WITH ALL CONDITIONS
S612
RECOGNITION PROCESS
S613
DISPLAY RESULT, OUTPUT TTS AND EXECUTE RETRIEVAL
END

FIG. 7

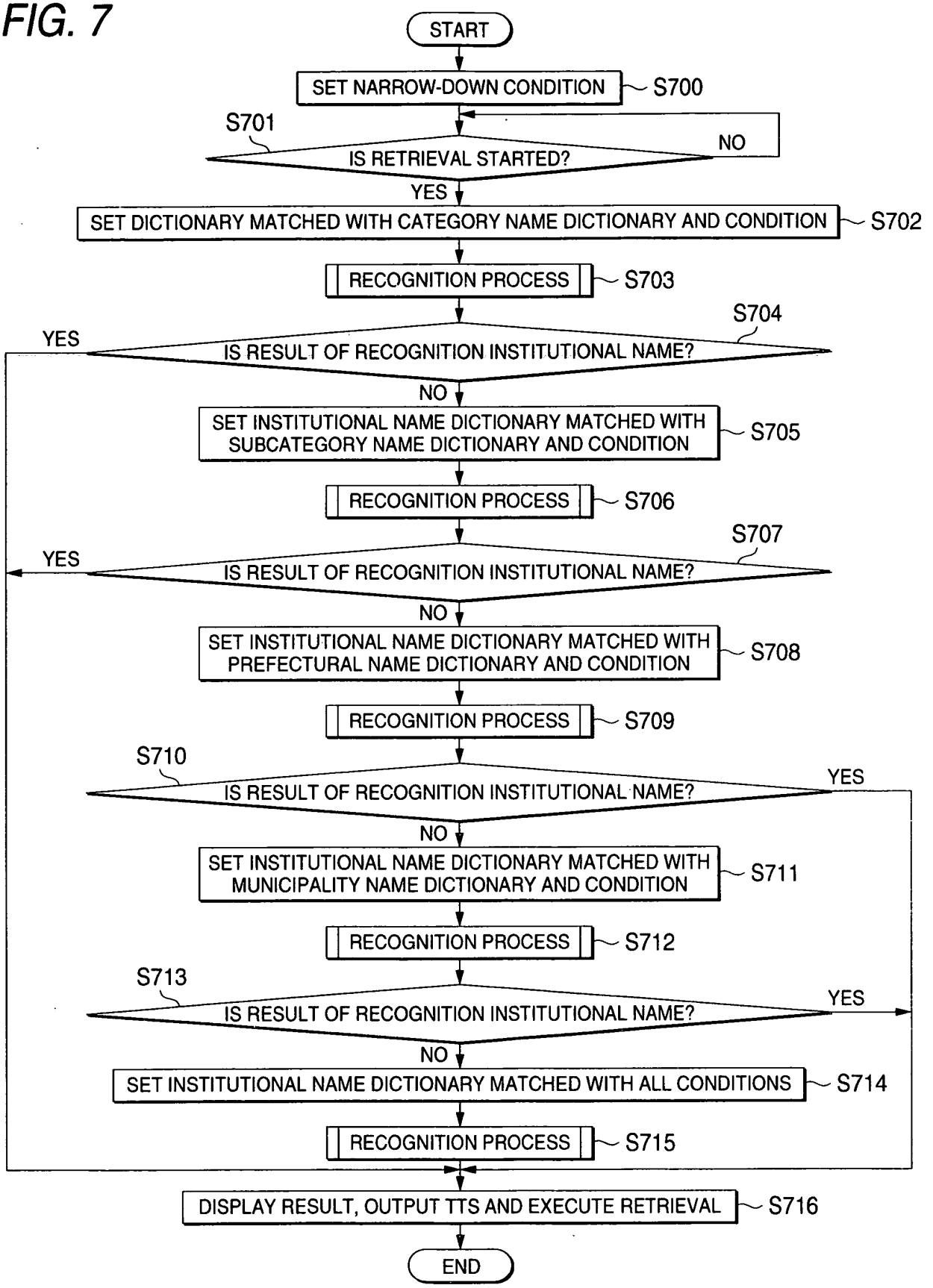

START
SET NARROW-DOWN CONDITION
S700
S701
IS RETRIEVAL STARTED?
NO
YES
SET DICTIONARY MATCHED WITH CATEGORY NAME DICTIONARY AND CONDITION
S702
RECOGNITION PROCESS
S703
S704
YES
IS RESULT OF RECOGNITION INSTITUTIONAL NAME?
NO
SET INSTITUTIONAL NAME DICTIONARY MATCHED WITH SUBCATEGORY NAME DICTIONARY AND CONDITION
S705
RECOGNITION PROCESS
S706
S707
YES
IS RESULT OF RECOGNITION INSTITUTIONAL NAME?
NO
SET INSTITUTIONAL NAME DICTIONARY MATCHED WITH PREFECTURAL NAME DICTIONARY AND CONDITION
S708
RECOGNITION PROCESS
S709
S710
IS RESULT OF RECOGNITION INSTITUTIONAL NAME?
YES
NO
SET INSTITUTIONAL NAME DICTIONARY MATCHED WITH MUNICIPALITY NAME DICTIONARY AND CONDITION
S711
RECOGNITION PROCESS
S712
S713
IS RESULT OF RECOGNITION INSTITUTIONAL NAME?
YES
NO
SET INSTITUTIONAL NAME DICTIONARY MATCHED WITH ALL CONDITIONS
S714
RECOGNITION PROCESS
S715
DISPLAY RESULT, OUTPUT TTS AND EXECUTE RETRIEVAL
S716
END

FIG. 8

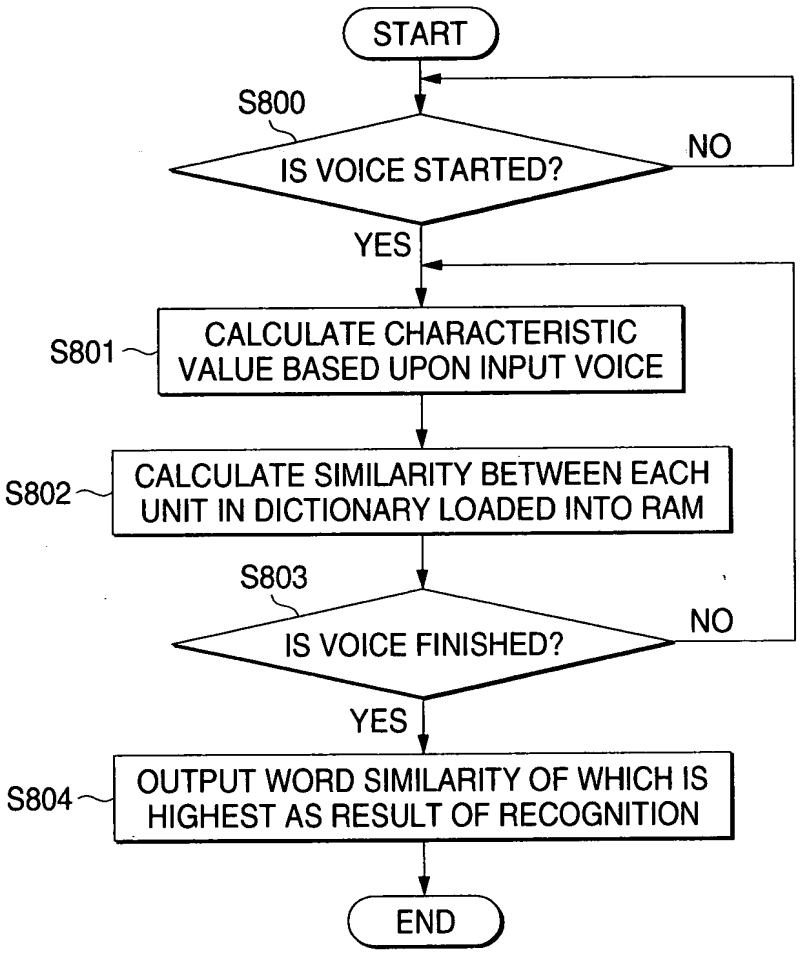
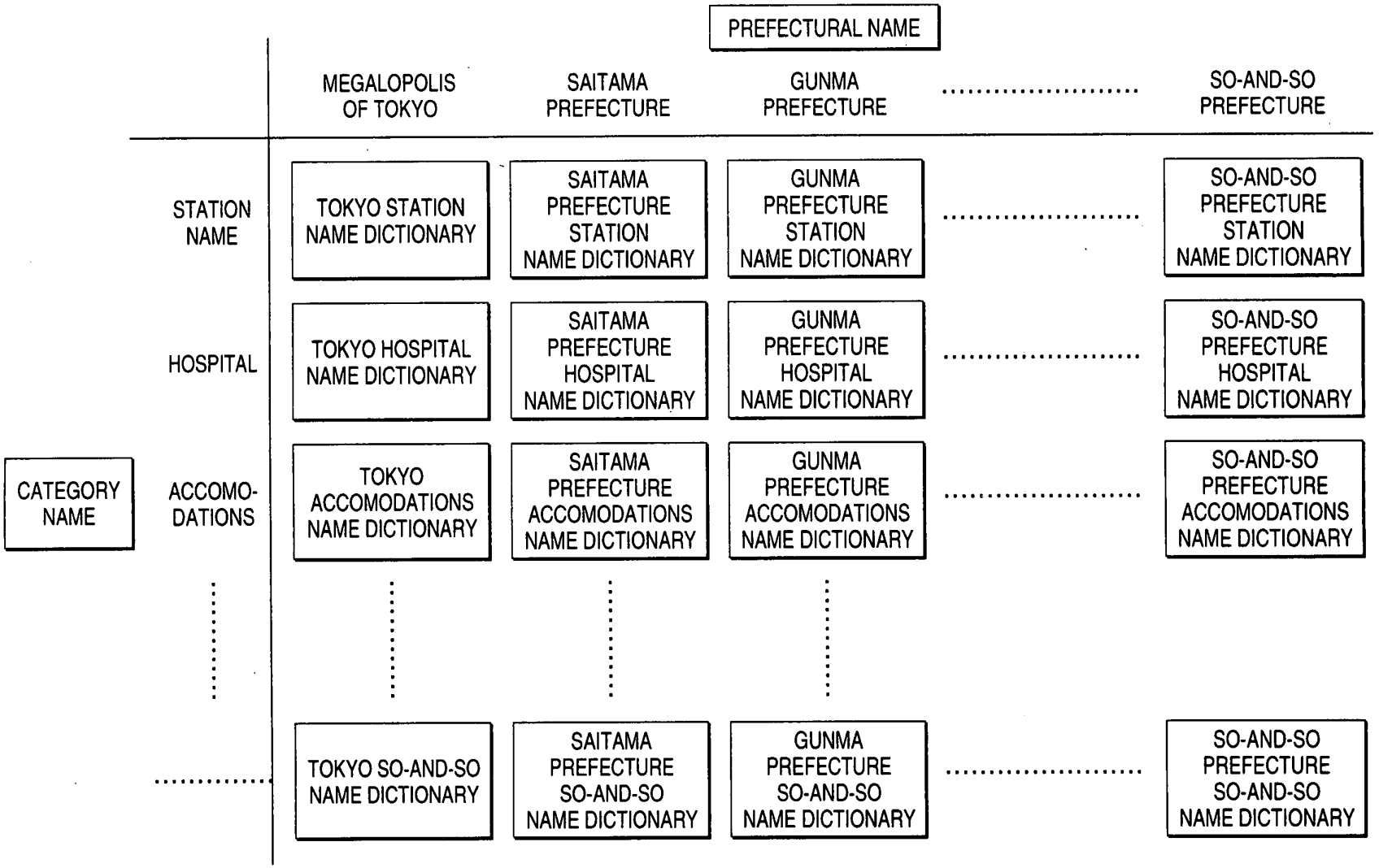
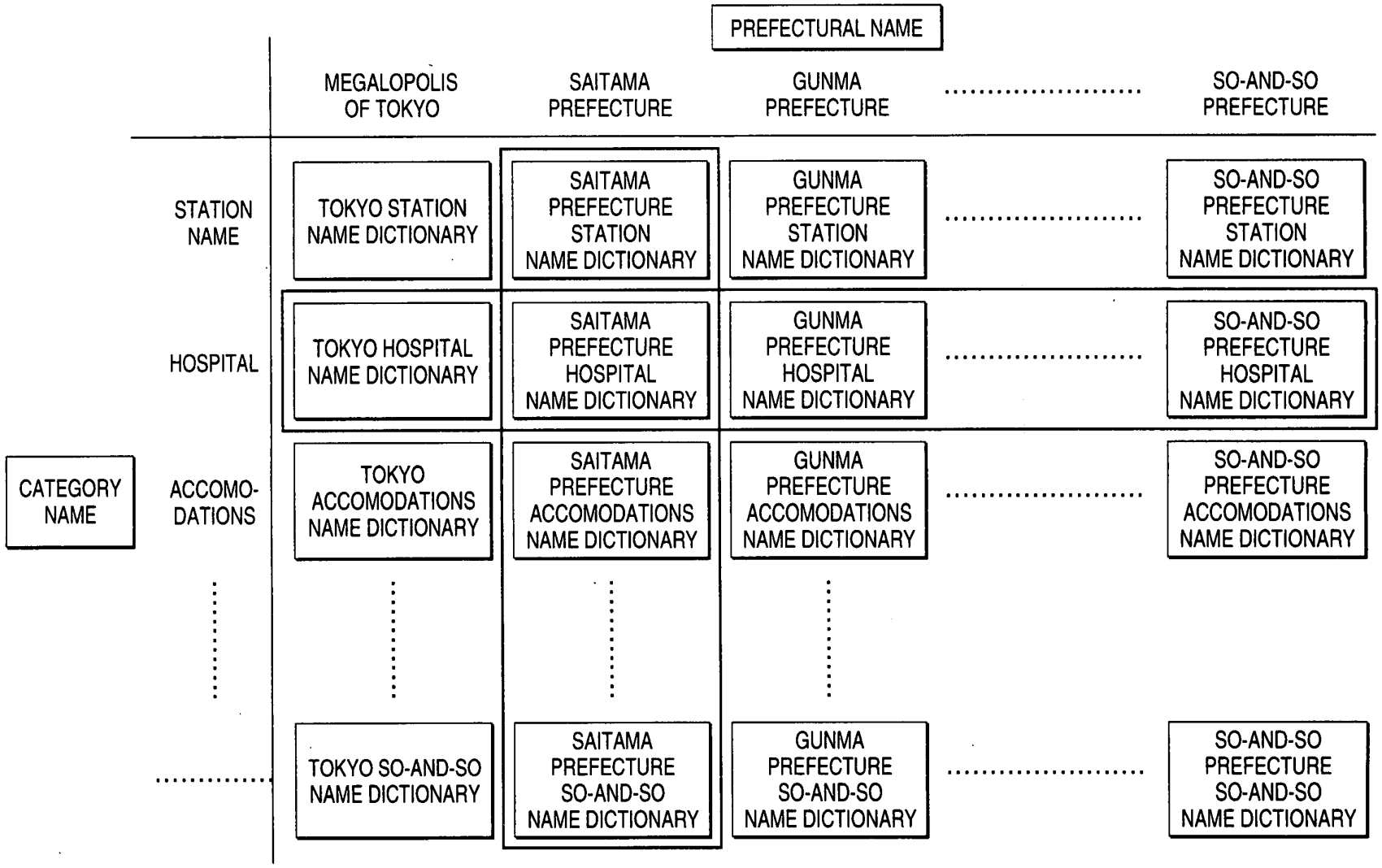

START
S800
IS VOICE STARTED?
NO
YES
S801
CALCULATE CHARACTERISTIC VALUE BASED UPON INPUT VOICE
S802
CALCULATE SIMILARITY BETWEEN EACH UNIT IN DICTIONARY LOADED INTO RAM
S803
IS VOICE FINISHED?
NO
YES
S804
OUTPUT WORD SIMILARITY OF WHICH IS HIGHEST AS RESULT OF RECOGNITION
END

FIG. 9



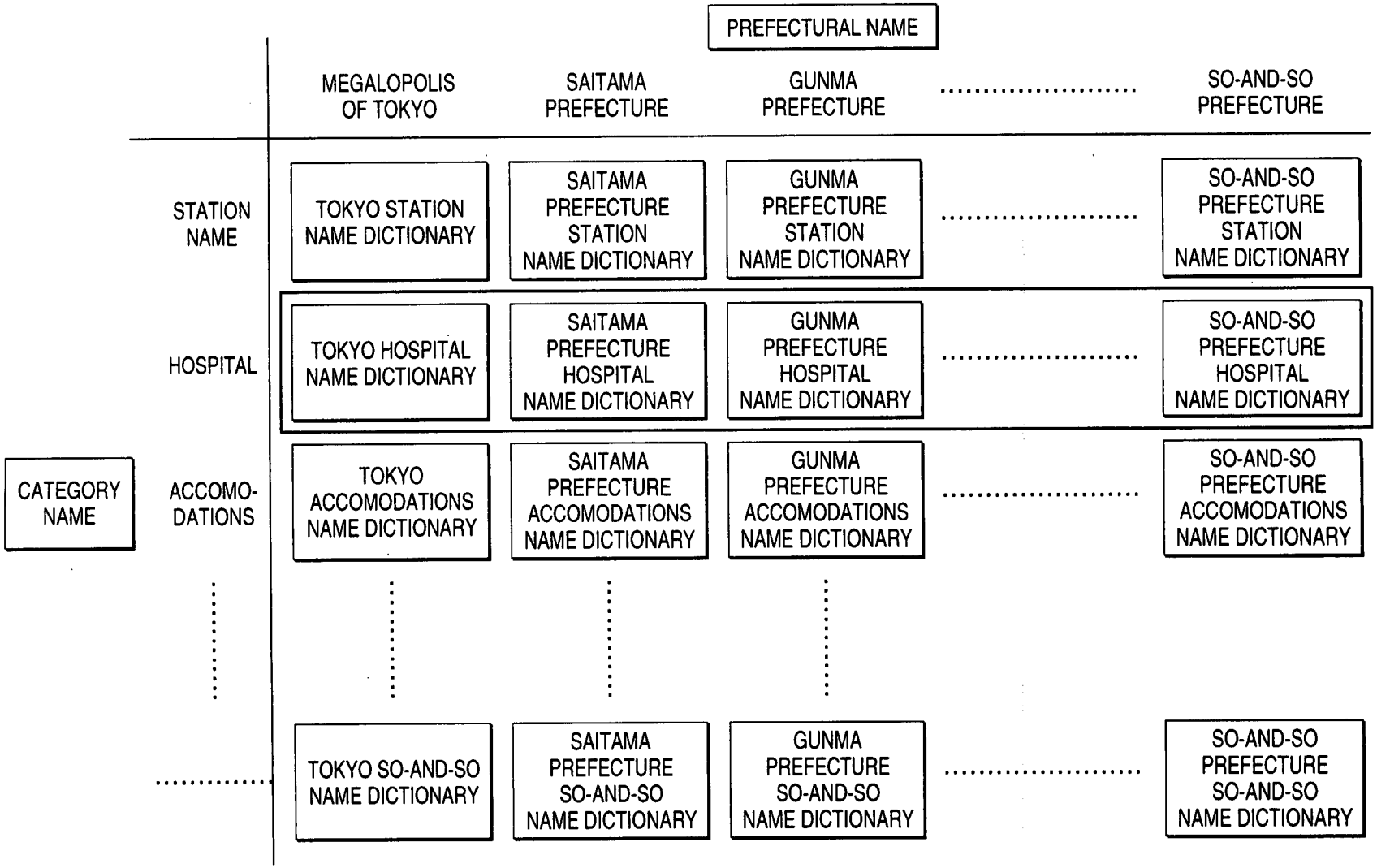
GROUP OF INSTITUTIONAL NAME DICTIONARIES CLASSIFIED ACCORDING TO NARROWING-DOWN CONDITION SUCH AS PREFECTURAL NAME AND CATEGORY NAME

FIG. 10



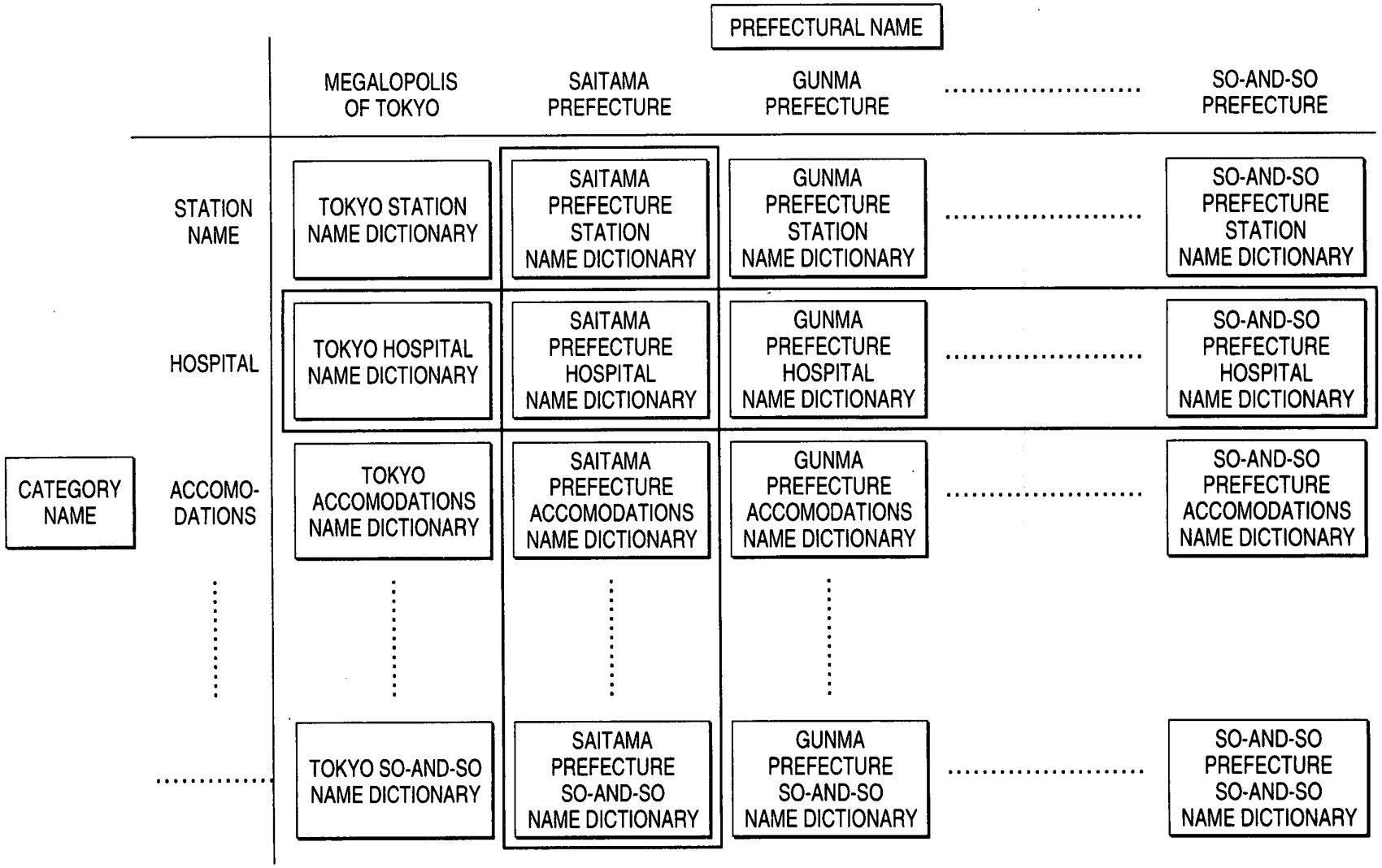
GROUP OF NAME DICTIONARIES SELECTED IN CASE SAITAMA PREFECTURE IS SET AS INITIAL SETIING

FIG. 11



GROUP OF NAME DICTIONARIES SELECTED IN CASE HOSPITAL IS SET AS INITIAL SETTING

FIG. 12



GROUP OF NAME DICTIONARIES SELECTED IN CASE SAITAMA PREFECTURE AND HOSPITAL ARE SET AS INITIAL SETTING

FIG. 13

(1) SYSTEM: "PLEASE VOCALIZE CATEGORY NAME"

(2) USER: "EDUCATIONAL INSTITUTION"

(3) SYSTEM: "NEXT CATEGORY NAME, PLEASE"

(4) USER: "HIGH SCHOOL"

(5) SYSTEM: "PREFECTURAL NAME, PLEASE"

(6) USER: "TOKYO"

(7) SYSTEM: "MUNICIPALITY NAME, PLEASE"

(8) USER: "SHIBUYA WARD"

(9) SYSTEM: "NAME, PLEASE"

SYSTEM: "SO-AND-SO SCHOOL"